UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Rey 1459

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

26191 7590 09/29/2009

FISH & RICHARDSON P.C. PO BOX 1022

MINNEAPOLIS, MN 55440-1022

EXAMINER
NEGIN PUISSELL SCOTT

ART UNIT PAPER NUMBER

1631 DATE MAILED: 09/29/2009

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNIY DOCKIET NO.
 CONFRMATION NO.

 10/723.594
 11/26/2003
 Yuan-Ping Pang
 07039-161002
 7578

TITLE OF INVENTION: MOLECULAR MODELING FOR METALLOPROTEINS

APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(8) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	12/29/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further c indicated unless correcte maintenance fee notificate	form should be used for correspondence including d below or directed oth ions.	or trans ig the P ierwise	smitting the ISSU atent, advance or in Block 1, by (a					hould be completed when correspondence address a trate "FEE ADDRESS" fo
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Not Fee pap bay	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
26191	7590 09/29	/2009					of Mailing or Trans	mission
FISH & RICHARDSON P.C. PO BOX 1022 MINNEAPOLIS, MN 55440-1022				I he Stat add tran	I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.			
								(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/723,594	11/26/2003			Yuan-Ping Pang		07039-161002 7578		
TITLE OF INVENTION:								
APPLN, TYPE	SMALL ENTITY	ISS	SUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES		\$755	\$300	\$0		\$1055	12/29/2009
EXAMI	EXAMINER		ART UNIT	CLASS-SUBCLASS				
NEGIN, RUSSELL SCOTT			I63I	702-012000	_			
"Fee Address" indi- PTO/SB/47; Rev 03-02 Number is required. 3. ASSIGNEE NAME AN	ess an assignee is ident in 37 CFR 3.II. Comp	" Indica ed. Use A TO BI	tion form of a Customer E PRINTED ON		vely, le firm (having as a agent) and the nan meys or agents. If printed. pe) satent. If an assign assignment.	membes of u no nan	per a 2p to p to a see is 3	ocument has been filed for
Please check the appropri	ate assignee category or	categor	ries (will not be pr	inted on the patent):	Individual 🔲 C	orporati	ion or other private gro	oup entity Government
Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies			o. Payment of Fee(s): (Plea A check is enclosed. Payment by credit can The Director is hereby overpayment, to Dept	rd. Form PTO-2038	is atta	iched. required fee(s), any de		
	SMALL ENTITY state	is. See 3	37 CFR 1.27.	b. Applicant is no lon				
NOTE: The Issue Fee and interest as shown by the re	Publication Fee (if req ecords of the United Sta	uired) w tes Pate	rill not be accepted int and Trademark	d from anyone other than to Office.	the applicant; a reg	stered.	attorney or agent; or th	e assignee or other party ir
Authorized Signature					Date			
Typed or printed name				Registration N				
This collection of informs an application. Confidenti submitting the completed this form and/or suggestic Box 1450, Alexandria, Vi Alexandria, Virginia 2231	tion is required by 37 C iality is governed by 35 application form to the ons for reducing this bur rginia 22313-1450. DC .3-1450.	FR 1.31 U.S.C. USPTO rden, sh O NOT S	11. The informatic 122 and 37 CFR O. Time will vary ould be sent to the SEND FEES OR	on is required to obtain or 1.14. This collection is es depending upon the indi- e Chief Information Offic COMPLETED FORMS T	retain a benefit by timated to take 12 vidual case. Any co er, U.S. Patent and O THIS ADDRES:	he pub minuter omment Trader S. SEN	lic which is to file (and is to complete, includin is on the amount of tir nark Office, U.S. Depa D TO: Commissioner I	by the USPTO to process, g gathering, preparing, and ne you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/723,594	11/26/2003	Yuan-Ping Pang	07039-161002	7578		
26191	7590 09/29/2009		EXAM	INER		
FISH & RICHA	ARDSON P.C.		NEGIN, RUSSELL SCOTT			
PO BOX 1022			ART UNIT	PAPER NUMBER		
MINNEAPOLIS, MN 55440-1022			1631			
			DATE MAILED: 09/29/200	10		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 101 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 101 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/723,594 PANG, YUAN-PING Notice of Allowability Examiner Art Unit RUSSELL S NEGIN 1631 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. This communication is responsive to the amendment after final rejection of 14 September 2009. The allowed claim(s) is/are 37-39 and 41-54. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

a) \square All

Applicant has	s THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements
noted below.	Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE	-MONTH PERIOD IS NOT EXTENDABLE.

3.
☐ Copies of the certified copies of the priority documents have been received in this national stage application from the

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) hereto or 2) to Paper No./Mail Date _____.

All b) ☐ Some* c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

(b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

2. Certified copies of the priority documents have been received in Application No.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)

2.
Notice of Draftperson's Patent Drawing Review (PTO-948)

Information Disclosure Statements (PTO/SB/08),
 Paper No./Mail Date

Paper No./Mail Date
 Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. Notice of Informal Patent Application

Interview Summary (PTO-413),
 Paper No./Mail Date

7. X Examiner's Amendment/Comment

8. X Examiner's Statement of Reasons for Allowance

9. 🔲 Other ___

Art Unit: 1631

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Teresa A. Lavoie on 22 September 2009.

The application has been amended as follows:

In the claims:

In line 1 of claim 47, delete the term "zinc." and insert -nickel.--.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

The amendments of applicant have overcome the rejections of record because applicant has amended independent claim 37 to use closed language and have the metal ion consist of only metal atoms. Additionally, all of the metal atoms are limited to be located at apices of a polyhedron.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably Application/Control Number: 10/723,594

Art Unit: 1631

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the central PTO Fax Center. The faxing of such pages must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The Central PTO Fax Center Number is (571) 273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell Negin, whose telephone number is (571) 272-1083. The examiner can normally be reached on Monday-Friday from 7am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Marjorie Moran, Supervisory Patent Examiner, can be reached at (571) 272-0720.

Information regarding the status of the application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Application/Control Number: 10/723,594 Page 4

Art Unit: 1631

Status information for unpublished applications is available through Private PAIR only.

For more information on the PAIR system, contact the Electronic Business Center

(EBC) at 866-217-9197 (toll-free).

/RSN/ Russell S. Negin 22 September 2009

/Marjorie Moran/ Supervisory Patent Examiner, Art Unit 1631